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Report Highlights:

Given the lack of any biotech regulatory system throughout the region, biotech products can be traded, consumed, and utilized for research and production without any significant restriction in most islands. However, the Caribbean is beginning to address the need for a regulatory regime for biosafety. Many islands are developing comprehensive biosafety policies while CARICOM is making attempts to harmonize these policies and strike a balance between biosafety and biotechnology development and trade.

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I. EXECUTIVE SUMMARY

Biotechnology is a new endeavor for the Caribbean. As such, there is no regulatory system in place yet to govern the use of modern biotechnology and safeguard public health, animal health, or the environment. Because the region has very limited agricultural production, and research is limited to a small number of crops in select islands, farm applications of biotechnology have been minimal. The lack of any regulation on the matter has also meant unrestricted trade for biotech products as well. Consumers generally have little awareness of biotech issues and the region relies on the United States as its main supplier of food and agricultural products.

Change may be just around the corner, however. As a whole the region is beginning to address the need for a regulatory regime for biosafety. Many islands are developing comprehensive biosafety policies and enacting legislation to this effect. However, several steps still need to be taken before any regulatory changes become reality. These include the development of specific implementing regulations, setting up the appropriate institutional structures, and capacity building in areas such as inspection and risk assessment.

While much of the policy formulation work to date has been done at the individual island level, CARICOM is now heading a serious effort to harmonize the region's biosafety policies to ensure an adequate balance between biosafety and biotechnology development and trade.

II. BIOTECHNOLOGY TRADE AND PRODUCTION

Farm activity is generally quite small in the Caribbean Basin Agricultural Trade Office (CBATO) islands of coverage^{1/} due mainly to very limited land, water and labor resources. Even within this context, production of biotech crops in the region is minute. Most production is really in the form of tissue culture research done at the laboratory level with very limited intentional introduction into the field. At their St. Augustine campus in Trinidad, the University of the West Indies (UWI) conducts tissue culture research on anturiums. The Ministry of Agriculture in Barbados also conducts sweet potato germplasm maintenance and they occasionally carry out field trials. Similarly, the Ministry of Agriculture in St. Lucia carries out tissue culture research on bananas. The West Indies Sugarcane Breeding Station in Barbados also does some germplasm research on sugarcane. No data are available on actual crop area.

From a trade standpoint, several islands import genetically modified corn and soybeans which are channeled mostly into animal feed production. Most if not all of these imports are of U.S. origin.

III. BIOTECHNOLOGY POLICY

Biotech policy development is still something new to the Caribbean. Less than half of the CBATO's islands of coverage are parties to the Cartagena Biosafety Protocol. Moreover, many islands have no laws or regulations specifically addressing Living Modified Organisms (LMO's) in terms of their use, their release into the environment, marketing, or trade. Where no policy exists, there has been no restriction on trade or tracking of biotech products. As a whole, the region is very open to U.S. trade.

However, some islands, particularly those in the eastern Caribbean, have made some important strides in recent years in terms of setting forth new biotech policies. With the help of the United Nations Environment Programme-Global Environment Facility (UNEP-GEF), several Caribbean countries have been working toward establishing their own National Biosafety Framework (NBF). Individual island NBF's are at different stages of development, but at a minimum several countries now have a "draft" regulatory policy (covering food, biosafety and co-existence), while a few have actually enacted laws to support their new policies. It is important to note, however, that no country has implementing regulations in place quite yet. The following table shows the CBATO islands of coverage which are parties to the Cartagena Protocol on Biosafety and their different stages of biotech policy development.

1/ - The CBATO islands of coverage include: Anguilla, Antigua & Barbuda, Aruba, The Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Guadeloupe, Martinique, Grenada, Montserrat, Netherlands Antilles (Curaçao, Bonaire, Sint Maarten, Saba & St. Eustatius), St. Kitts & Nevis, St. Lucia, Saint Martin, St. Barthélemy, St. Vincent & the Grenadines, Trinidad & Tobago, and Turks & Caicos Islands.

Country	Cartagena Protocol on Biosafety in Effect	National Biosafety Framework (NBF) in Place	Biosafety Legislation in Place	Biosafety Implementation
Antigua & Barbuda	2003	Yes	Yes	No
The Bahamas	2004	Draft	No	No
Barbados	2003	Draft	No	No
Dominica	2004	Yes	Yes	No
Grenada	2004	Yes	Yes	No
St. Kitts & Nevis	2003	Yes	No	No
St. Lucia	2005	No	Yes	No
St. Vincent & The Grenadines	2003	Yes	No	No
Trinidad & Tobago	2003	Draft	No	No

Harmonization of Regional Policies

Much of the work to develop the NBF's in the islands listed above was done separately and with only limited collaboration. Thus, with each new NBF being developed the need for harmonization quickly began to become evident. Enter the Caribbean Community (CARICOM), which is made up of 15 member states and 4 associate members throughout the region, and is the strongest regional organization in the Caribbean. CARICOM established a committee, chaired by its own Caribbean Agricultural Research and Development Institute (CARDI), to address the issue of harmonization and coordinate efforts between member states. The committee is currently reviewing all the individual biotech policies for differences and is expected to report back to CARICOM later this year. The issue of biotech policy harmonization is expected to be addressed at the next CARICOM Ministers of Agriculture meeting in October 2008.

Further to this harmonization effort, all 15 CARICOM members are reportedly establishing a National Agricultural & Food Safety Agency (NAFSA) in their own countries. In most cases the NAFSA is composed of the agencies responsible for food safety and plant and animal health. CARICOM has established a Caribbean Agricultural & Food Safety Agency (CAFSA) which will act as a coordinating umbrella organization. However, CAFSA has not yet been implemented.

In essence, until policies and regulations are fully developed and enacted (and hopefully harmonized) and the institutional structures are put in place, no regulatory implementation can take place. In such an environment, governments are generally following the guidance of international organizations, the UWI, CARDI, and similar institutions when it comes to dealing with any biosafety issues that may arise.

Labeling

One of the issues which will need to be ironed out is that of labeling of biotech products. While some countries such as Trinidad & Tobago favor a voluntary approach to labeling, others such as Grenada and St. Vincent and the Grenadines are posed to make labeling mandatory. Enforcement of mandatory labeling will likely be disruptive to trade. On the one hand, most of the islands source a large share if not the majority of their food from the United States, where biotech labeling is not mandatory. Moreover, there is quite a bit of

intra-regional food trade which takes place as well and which would surely be affected. This is an important element which will need to be harmonized through CARICOM's leadership.

Structure and Organizations

The institutional framework being developed for the different organizations involved with biosafety varies by island. In general, however, each island where a biosafety policy is under development would eventually have a National Biosafety Authority or equivalent organization overseeing all matters pertaining to biotechnology and biosafety. Each island would also have a BioSafety Committee comprised of representatives from all relevant Ministries and organizations. In fact, practically all of the countries engaged in biotech policy formulation have already appointed a BioSafety Committee. In Trinidad and Tobago, for instance, the current Biosafety Committee is comprised of six members from the Ministries of Agriculture, Health, Trade and Consumer Affairs, NAFSA, the Environmental Management Authority, and the UWI. In Trinidad and Tobago the Biosafety Committee acts as the national biosafety clearinghouse but in others countries this function may be assigned to another entity.

IV. MARKETING ISSUES

As biotech is relatively new to the Caribbean, overall awareness of the subject tends to be low. Some producers which might be aware of the benefits of biotechnology are more inclined to be in favor of adopting biotechnology. However, as one moves to importers, retailers and eventually to consumers the level of awareness drops considerably. Given this situation and the lack of any biotech-specific policy implementation to date, there are no real marketing issues which affect U.S. trade at this point.

Some countries, particularly some eastern Caribbean islands that export organically grown crops to niche markets in Europe, are concerned with biodiversity issues. With the islands being so small, they are specifically concerned with containment of and coexistence with any biotech material introduced into the islands that would jeopardize their exports to Europe. This concern may be a factor in shaping the regulatory environment in the region.

V. CAPACITY BUILDING AND OUTREACH

Practically all policy documents being developed in the region recognize the limitations that exist in terms of institutional structures and human resource capacity. Within the CBATO region of coverage, much of the current expertise lies in Trinidad and Tobago and to some extent in Barbados. Part of the reason for this is that the UWI, which is one of the leading research institutions in the region, has campuses in both countries. Moreover, Trinidad is also home to CARDI which is a regional research institution as well and as mentioned earlier is charged with leading biotech policy harmonization efforts. Trinidad also has greater laboratory capability than many of its neighbors.

As several Caribbean islands gear up to begin implementing their new policies in the near future, capacity building is viewed as a critical element to the success of the region's biosafety efforts. More specifically, the region is in need of training for their inspection services. Another area of need is risk assessment, for purposes of controlling the introduction of new plant varieties into the environment. The CBATO is planning to coordinate a biotech capacity building project for the region beginning in 2009. It is important to note that Norway has been active in conducting biotech awareness and other general biotech sessions in the region for the past several years.

VI. REFERENCE MATERIAL

1. Draft Antigua and Barbuda Biosafety and Biotechnology Management Bill
(<http://www.unep.org/biosafety/files/AGNBFrep.pdf>)
2. Draft National Biosecurity Strategy, Commonwealth of The Bahamas
(<http://www.unep.org/biosafety/files/BSNBFrep.pdf>)
3. Draft National Biosafety Framework for Barbados
(<http://www.unep.org/biosafety/files/BBNBFrep.pdf>)
4. Dominica Biosafety and Biotechnology Management Act
(<http://www.unep.org/biosafety/files/DMNBFrep.pdf>)
5. Draft Bill on Biosafety (The Biosafety Act), Grenada
(<http://www.unep.org/biosafety/files/GDNBFrep.pdf>)
6. Draft National Biosafety Framework of St. Kitts & Nevis
(<http://www.unep.org/biosafety/files/KNNBFrep.pdf>)
7. St. Lucia Biosafety Act (Final Draft)
(<http://www.unep.org/biosafety/files/LCNBFrep.pdf>)
8. St. Vincent and the Grenadines Biosafety Act, 2007 (Draft)
(<http://www.unep.org/biosafety/files/VCNBFrep.pdf>)
9. Draft Biosafety Policy of Trinidad and Tobago.